

1.
=> fil reg;s (chitin or chitosin or galactomannan or laminin or pepsin or
atelocollagen)/cn
COST IN U.S. DOLLARS

Uthmaned
601806

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.31	0.46

FILE 'REGISTRY' ENTERED AT 09:33:48 ON 12 OCT 2001
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STRUCTURE FILE UPDATES: 11 OCT 2001 HIGHEST RN 361519-24-6
DICTIONARY FILE UPDATES: 11 OCT 2001 HIGHEST RN 361519-24-6

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
for details.

	1 CHITIN/CN
	0 CHITOSIN/CN
	1 GALACTOMANNAN/CN
	0 LAMININ/CN
	1 PEPSIN/CN
	0 ATELOCOLLAGEN/CN
L1	3 (CHITIN OR CHITOSIN OR GALACTOMANNAN OR LAMININ OR PEPSIN OR ATELOCOLLAGEN)/CN

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	23.11	23.57

FILE 'MEDLINE' ENTERED AT 09:34:15 ON 12 OCT 2001

FILE 'BIOSIS' ENTERED AT 09:34:15 ON 12 OCT 2001
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FILE 'CAPLUS' ENTERED AT 09:34:15 ON 12 OCT 2001
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FILE 'WPIDS' ENTERED AT 09:34:15 ON 12 OCT 2001
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=> s (l1 or biopolymer or structur? protein or polysaccharide or orc or norc or
cellulose deriv? or chitin or chitosin or galactomannan or laminin or pepsin or
atelocollagen or native collagen types or gelatin or fibronectin?)

Searched by: Mary Hale 308-4258 CM-1 12D16

L2 93741 FILE MEDLINE
 L3 93888 FILE BIOSIS
 L4 26076 FILE BIOTECHNO
 L5 44442 FILE JICST-EPLUS
 L6 64312 FILE EMBASE
 L7 195296 FILE CAPLUS
 L8 40786 FILE WPIDS

TOTAL FOR ALL FILES

L9 558541 (L1 OR BIOPOLYMER OR STRUCTUR? PROTEIN OR POLYSACCHARIDE OR ORC
 OR NORC OR CELLULOSE DERIV? OR CHITIN OR CHITOSIN OR GALACTOMANN
 AN OR LAMININ OR PEPSIN OR ATELOCOLLAGEN OR NATIVE COLLAGEN
 TYPES OR GELATIN OR FIBRONECTIN?)

=> s l9 and (therap? peptide or growth factor or (fibroblast or platelet derived or
 transform? or epidermal) (w) growth factor or fgf or pdgf or tgf or egf or
 (haemostatic or antimicrobial or antibacterial or anti adhes?) (w) agent! or
 collagen?)

L10 15487 FILE MEDLINE
 L11 15058 FILE BIOSIS
 L12 4805 FILE BIOTECHNO
 L13 4469 FILE JICST-EPLUS
 L14 12388 FILE EMBASE
 L15 16210 FILE CAPLUS
 L16 2354 FILE WPIDS

TOTAL FOR ALL FILES

L17 70771 L9 AND (THERAP? PEPTIDE OR GROWTH FACTOR OR (FIBROBLAST OR PLATE
 LET DERIVED OR TRANSFORM? OR EPIDERMAL) (W) GROWTH FACTOR OR FGF
 OR PDGF OR TGF OR EGF OR (HAEMOSTATIC OR ANTIMICROBIAL OR ANTIBA
 CTERIAL OR ANTI ADHES?) (W) AGENT! OR COLLAGEN?)

=> s l9 and (bone morphogene? protein or insulin like growth factor or igf)

L18 387 FILE MEDLINE
 L19 342 FILE BIOSIS
 L20 163 FILE BIOTECHNO
 L21 87 FILE JICST-EPLUS
 L22 323 FILE EMBASE
 L23 617 FILE CAPLUS
 L24 105 FILE WPIDS

TOTAL FOR ALL FILES

L25 2024 L9 AND (BONE MORPHOGENE? PROTEIN OR INSULIN LIKE GROWTH FACTOR
 OR IGF)

=> s (l17 or l25) and (human mitogenic or angiogenic)

L26 188 FILE MEDLINE
 L27 110 FILE BIOSIS
 L28 49 FILE BIOTECHNO
 L29 15 FILE JICST-EPLUS
 L30 134 FILE EMBASE
 L31 180 FILE CAPLUS
 L32 54 FILE WPIDS

TOTAL FOR ALL FILES

L33 730 (L17 OR L25) AND (HUMAN MITOGENIC OR ANGIOGENIC)

=> s l33 and (freeze(w) (dry? or dried) or lyophil? or desiccat?)

L34 1 FILE MEDLINE
 L35 1 FILE BIOSIS
 L36 1 FILE BIOTECHNO

L37 0 FILE JICST-EPLUS
L38 1 FILE EMBASE
L39 5 FILE CAPLUS
L40 2 FILE WPIDS

TOTAL FOR ALL FILES

L41 11 L33 AND (FREEZE(W) (DRY? OR DRIED) OR LYOPHIL? OR DESICCAT?)

=> s l41 and radical scavenger?

L42 0 FILE MEDLINE
L43 0 FILE BIOSIS
L44 0 FILE BIOTECHNO
L45 0 FILE JICST-EPLUS
L46 0 FILE EMBASE
L47 0 FILE CAPLUS
L48 0 FILE WPIDS

TOTAL FOR ALL FILES

L49 0 L41 AND RADICAL SCAVENGER?

=> dup rem l41

PROCESSING COMPLETED FOR L41

L50 7 DUP REM L41 (4 DUPLICATES REMOVED)

=> d cbib abs 1-7;s therap? peptide! and polysaccharide? and steril?

L50 ANSWER 1 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 2000-368390 [32] WPIDS

AB GB 2344519 A UPAB: 20000706

NOVELTY - A sterile composition (I) comprising a **therapeutic peptide** (TP) complexed to a **biopolymer** (BP) (the TP and BP are dispersed in or on a carrier), is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process (II) for the preparation of (I), comprising:

- (1) providing a complex of a TP and a BP;
- (2) sterilizing the complex; and
- (3) dispersing the complex in or on the carrier.

USE - (I) is a sterile composition that may be used for topically administering TPs to animals. It is particularly suitable for topically delivering these TPs to the skin, especially wound sites.

ADVANTAGE - The compositions (I) may be sterilized prior to administration as the TPs are stabilized against decomposition during sterilization by being formulated with a BP such as a **structural protein** or polyanionic **polysaccharide**.

Dwg.0/2

L50 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2001 ACS

1999:404862 Document No. 131:39728 Agent for gene therapy of tumors and neurodegenerative, cardiovascular, and autoimmune diseases. Reszka, Regina; Berndt, Antje (Max-Delbrueck-Centrum fuer Molekulare Medizin, Germany). PCT Int. Appl. WO 9930741 A2 19990624, 28 pp. DESIGNATED STATES: W: JP, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German). CODEN: PIXXD2. APPLICATION: WO 1998-DE3763 19981214. PRIORITY: DE 1997-19756309 19971212.

AB A method for local/regional gene therapy of tumors (esp. liver metastases) and of neurodegenerative, cardiovascular, and autoimmune diseases comprises combined application of liposomes/plasmid DNA complexes having different compns., quantities, and concns. The pharmaceutical agent employed comprises .gtoreq.1 genetic material which are nonencapsulated or encapsulated in PEG, immuno-, immuno/PEG, or cationic, optionally polymer-modified liposomes; **lyophilized** or degradable starch

particles and/or **gelatin** and/or polymer nanoparticles; and a contrast agent contg. I, Gd, magnetite, or F. The genetic material preferably constitutes a suicide gene such as herpes simplex virus thymidine kinase (HSV-tk) gene, deaminase gene, or a cytokine gene coding for IL-2, IL-4, IL-6, IL-10, IL-12, or IL-15, and is enclosed in multilamellar liposomes comprising an amphiphile, a steroid, and an anionic lipid. Thus, phosphatidylcholine-cholesterol-PEG liposomes contg. suicide gene pUT 649, which encodes HSV-tk, were injected together with a drug carrier embolization system into the common hepatic artery of rats which had been inoculated with CC531 carcinoma cells 10 days previously. Beginning 5 days later, the rats were treated with ganciclovir (100 mg/kg/day i.p.) for 14 days. The rats showed a decrease in liver metastases after 30 days owing to conversion of ganciclovir by HSV-tk to a nucleotide-like compd. which was incorporated into the DNA of dividing liver cells, causing cessation of DNA synthesis.

L50 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2001 ACS

1998:564281 Document No. 129:193757 Implantable **collagen**

-containing putty material. Damien, Christopher J. (Benedict, James A., USA). PCT Int. Appl. WO 9835653 A1 19980820, 47 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1998-US2751 19980212. PRIORITY: US 1997-37071 19970213.

AB Compns. for an implantable putty material for delivery of active compds. to a patient is provided. More specifically, the present invention provides a material having a pH of between about 3 and 6 and possessing a putty like phys. property, wherein the compn. of the material includes **collagen** and water. The present invention also provides a method for using the implantable putty material. Bovine demineralized bone was prepd. by grinding bovine bone to a particle size of 125-850 .mu.m and demineralized in 0.6 M HCl, washed with phosphate buffered soln., rinsed with ethanol and dried. A gel was prepd. by mixing 100 mg of purified bovine tendon type I **collagen** and 7.4 mL of aq. 100 mM ascorbic acid soln. The gel was **lyophilized** and mixed with water and about 2.1-2.4 g of demineralized bone material. The resulting compn. had acceptable phys. properties such as cohesiveness, elasticity and moldability.

L50 ANSWER 4 OF 7 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1993-305226 [39] WPIDS

AB EP 562864 A UPAB: 19940120

A bioabsorbable heteromorphic sponge consists of a matrix structure of sponge, at least one substructure and at least one pharmacologically active agent. The matrix structure and substructure(s) are made of bioabsorbable **biopolymer** materials.

Pref. the substructure consists of milled **freeze dried** sponges, powders, films, flaked or broken films, aggregates, microspheres, fibres and/or fibre bundles. The bioabsorbable **biopolymer** is a macromolecule chosen from all **collagen** types, elastin, **fibronectin**, vitronectin, **laminin**, tenascin, hyaluronic acid, chondroitin sulphate, dermatan sulphate, heparan sulphate, fibrin, oxidised regenerated cellulose and/or dextran. The active ingredient can be incorporated into the matrix structure or substructure or two separate active ingredients are used, one in the matrix structure, the other in the substructure. The active ingredient is an antimicrobial, cytokine, **growth factor**, **growth factor** antagonist, antibody, peptide,

angiogenic factor, hormone, enzyme, metabolic or breakdown prod.
of **biopolymers** and/or pain killer.

USE/ADVANTAGE - The sponges can be used as implantable materials in wound repair of full and partial thickness defects of the skin and defects or deficiencies of other soft tissues. The porous material is readily invaded by cells of the host organism and gives controlled or phasic release of pharmacologically active agents into the wound.

Dwg.0/0

ABEQ US 5466462 A UPAB: 19951221

A bioabsorbable heteromorphic sponge comprises a sponge matrix structure, a macroscopic substructure and active agent(s). The sponge matrix and at least one macroscopic substructure are of biosorbable **biopolymers**, and one substructure is milled **freeze-dried** sponges, powders, films, flakes, aggregates, microspheres, fibres and fibre bundles, etc.

The heteromorphic sponge is **collagen**, **fibronectin**, elastin, vitronction, **laminin**, tenascin, hyaluronic acid, chondroitin sulphate, dermatan sulphate, etc. Active agents are incorporated separately into matrix and substructure. These include antimicrobials, cytokines, **growth factors**, and their antagonists, antibodies, peptides, **angiogenic** factors, hormones, enzymes, etc.

ADVANTAGE - Controlled or phasic release of active agents into a wound.

Dwg.0/0

ABEQ US 5700476 A UPAB: 19980209

A bioabsorbable heteromorphic sponge consists of a matrix structure of sponge, at least one substructure and at least one pharmacologically active agent. The matrix structure and substructure(s) are made of bioabsorbable **biopolymer** materials.

Pref. the substructure consists of milled **freeze dried** sponges, powders, films, flaked or broken films, aggregates, microspheres, fibres and/or fibre bundles. The bioabsorbable **biopolymer** is a macromolecule chosen from all **collagen** types, elastin, **fibronectin**, vitronectin, **laminin**, tenascin, hyaluronic acid, chondroitin sulphate, dermatan sulphate, heparan sulphate, fibrin, oxidised regenerated cellulose and/or dextran. The active ingredient can be incorporated into the matrix structure or substructure or two separate active ingredients are used, one in the matrix structure, the other in the substructure. The active ingredient is an antimicrobial, cytokine, **growth factor**, **growth factor** antagonist, antibody, peptide, **angiogenic** factor, hormone, enzyme, metabolic or breakdown prod. of **biopolymers** and/or pain killer.

USE/ADVANTAGE - The sponges can be used as implantable materials in wound repair of full and partial thickness defects of the skin and defects or deficiencies of other soft tissues. The porous material is readily invaded by cells of the host organism and gives controlled or phasic release of pharmacologically active agents into the wound.

Dwg.0/0

L50 ANSWER 5 OF 7 MEDLINE

DUPLICATE 1

91065249 Document Number: 91065249. PubMed ID: 1701129. Preliminary characterization of **angiogenic** activity in media conditioned by cells from luteinized rat ovaries. Rone J D; Goodman A L. (Department of Gynecology and Obstetrics, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205.) ENDOCRINOLOGY, (1990 Dec) 127 (6) 2821-8. Journal code: EGZ; 0375040. ISSN: 0013-7227. Pub. country: United States. Language: English.

AB **Angiogenic** activity was detected in media conditioned by ovarian cells from superovulated, pseudopregnant (PMSG/human CG treated) immature Holtzman rats. Media conditioned by cells from luteinized rat ovaries

Searched by: Mary Hale 308-4258 CM-1 12D16

stimulated the directed migration of rabbit endothelial cells or mouse Balb/c3T3 cells, but was not mitogenic to either cell type. That endotheliotropic activity was not associated with a steroid was indicated by the finding that chemoattractant activity was detected in fractions after reversed-phase C18 chromatography, which removes more than 95% of steroids present in the media, and that chemoattractant activity was precipitated by ammonium sulfate and by ethanol. Full chemoattractant activity was recovered after boiling (95 C for 30 min), **lyophilization**, dialysis, Sephadex G-25 desalting columns, and pH changes from 3-10. After Sephadex G-200 chromatography, chemoattractant activity emerged at elution volumes corresponding to 20,000-30,000 mol wt. Chemoattractant activity was not retained by Concanavalin A-Sepharose or **gelatin**-Sepharose, and was only partially retained by heparin-agarose. Chemoattractant activity was also partially retained on both cation and anion exchange columns. Our collective findings indicate the presence of a nonsteroidal, heat-stable, pronase-sensitive factor, nominal mol wt of 20,000-30,000, in media conditioned by cells from luteinized rat ovaries; this factor is chemoattractive but not mitogenic to endothelial cells. Ovarian-derived chemoattractant activity appears to be distinct from **fibroblast growth factor** because it lacked detectable mitogenic activity, and because **fibroblast growth factor** was not active in our cell migration bioassay. Because stimulation of endothelial cell migration is a key event during angiogenesis, demonstration of an ovarian endotheliotropic chemoattractant is consistent with our hypothesis that angiogenesis factors play a role in the paracrine regulation of ovarian function.

L50 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2001 ACS

1989:639516 Document No. 111:239516 Stable **lyophilized** formulations containing **growth factors**. Finkenaur, Amy L.; Cohen, Jonathan M. (Ethicon, Inc., USA). Eur. Pat. Appl. EP 308238 A1 19890322, 11 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1988-308573 19880916. PRIORITY: US 1987-98817 19870918.

AB A stable **lyophilized** compn. comprises a polypeptide **growth factor** having **human mitogenic** or **angiogenic** activity and a water-sol. or water-swellaable polymer capable of imparting viscosity to a reconstituted soln. of the compn. A compn. contg. **EGF** 50 .mu.g and mannitol 50 mg was **lyophilized** by freezing at -55.degree. at 1 atm for 4 h, -25.degree. at 1 atm for 4 h, and -55.degree. for 0.5 h at full vacuum. The **lyophilized** cake was stable for at least 209 days at 37.degree..

L50 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2001 ACS

1986:213303 Document No. 104:213303 Biodegradable matrix. Silver, Frederick H.; Berg, Richard A.; Birk, David E.; Weadock, Kevin; Whyne, Conrad (University of Medicine and Dentistry of New Jersey, USA). PCT Int. Appl. WO 8504413 A1 19851010, 59 pp. DESIGNATED STATES: W: AT, AU, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SE, SU; RW: AT, BE, CH, DE, FR, GB, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1985-US504 19850327. PRIORITY: US 1984-593733 19840327.

AB Prepn. of a biodegradable **collagen**-based matrix in sponge or sheet form and in which a carrier compd. (**fibronectin**, **laminin**, hyaluronate, proteoglycan, epidermal- and platelet-**growth factors**, antibiotic, spermicide, fungicide, etc.) is incorporated is described. The process includes isolation of type I, II, and III **collagens**, mixing with a liq. medium contg. a dispersing agent and **freeze drying**. A crosslinking agent (carbodiimide or a succinimidyl active ester is added either prior to or after **freeze drying**. Swelling ratio, mech.

properties, and biocompatibility of the prep. matrix were detd. and the results were favorable.

L51 0 FILE MEDLINE
L52 0 FILE BIOSIS
L53 0 FILE BIOTECHNO
L54 0 FILE JICST-EPLUS
L55 0 FILE EMBASE
L56 1 FILE CAPLUS
L57 1 FILE WPIDS

TOTAL FOR ALL FILES

L58 2 THERAP? PEPTIDE! AND POLYSACCHARIDE? AND STERIL?

=> dup rem l58;d cbib abs 1-2;s cullen, b?/au,in or cullen b?/au,in
PROCESSING COMPLETED FOR L58

L59 2 DUP REM L58 (0 DUPLICATES REMOVED)

L59 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2001 ACS

2000:401694 Document No. 133:34483 **Sterile** complex of therapeutic peptide bonded to a **polysaccharide**. Cullen, Breda; Silcock, Derek; Van Leeuwen, Peter; Harvey, Wilson (Johnson & Johnson Medical Limited, UK). PCT Int. Appl. WO 2000033893 A1 20000615, 41 pp.
DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG.
(English). CODEN: PIXXD2. APPLICATION: WO 1999-GB4094 19991206.
PRIORITY: GB 1998-26897-19981207.

AB The invention provides **sterile** compns. comprising a complex of a therapeutic peptide and a **polysaccharide** selected from the group consisting of cellulose derivs., chitin, chitosans, galactomannans, and mixts. thereof, wherein the complex has been **sterilized** with ionizing radiation. The presence of the **polysaccharides** surprisingly stabilizes **therapeutic peptides** against decompn. under ionizing conditions, esp. under gamma-irradn. Processes for the prepn. of the **sterile** compns. and processes for the prepn. of **sterile therapeutic peptides** are also claimed. For example, a **sterile** pharmaceutical gel for topical administration to promote wound healing was formulated contg. CM-cellulose 2.4, hydroxyethyl cellulose 0.3, NaCl 0.24, propylene glycol 20.2, collagen/oxidized regenerated cellulose/platelet-derived growth factor (1 wt.%) 2.0, and water up to 100%, resp.

L59 ANSWER 2 OF 2 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 2000-368390 [32] WPIDS

AB GB 2344519 A UPAB: 20000706

NOVELTY - A **sterile** composition (I) comprising a therapeutic peptide (TP) complexed to a biopolymer (BP) (the TP and BP are dispersed in or on a carrier), is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process (II) for the preparation of (I), comprising:

- (1) providing a complex of a TP and a BP;
- (2) **sterilizing** the complex; and
- (3) dispersing the complex in or on the carrier.

USE - (I) is a **sterile** composition that may be used for topically administering TPs to animals. It is particularly suitable for topically delivering these TPs to the skin, especially wound sites.

ADVANTAGE - The compositions (I) may be **sterilized** prior to administration as the TPs are stabilized against decomposition during **sterilization** by being formulated with a BP such as a structural protein or polyanionic **polysaccharide**.
Dwg.0/2

'IN' IS NOT A VALID FIELD CODE
L60 295 FILE MEDLINE
L61 375 FILE BIOSIS
'IN' IS NOT A VALID FIELD CODE
L62 128 FILE BIOTECHNO
L63 1 FILE JICST-EPLUS
'IN' IS NOT A VALID FIELD CODE
L64 245 FILE EMBASE
L65 258 FILE CAPLUS
L66 25 FILE WPIDS

TOTAL FOR ALL FILES

L67 1327 CULLEN, B?/AU,IN OR CULLEN B?/AU,IN

=> s silcock, d?/au,in or silcock d?/au,in;s leeuwen, p?/au,in or leeuwen p?/au,in

'IN' IS NOT A VALID FIELD CODE
L68 6 FILE MEDLINE
L69 15 FILE BIOSIS
'IN' IS NOT A VALID FIELD CODE
L70 4 FILE BIOTECHNO
L71 0 FILE JICST-EPLUS
'IN' IS NOT A VALID FIELD CODE
L72 5 FILE EMBASE
L73 12 FILE CAPLUS
L74 5 FILE WPIDS

TOTAL FOR ALL FILES

L75 47 SILCOCK, D?/AU,IN OR SILCOCK D?/AU,IN

'IN' IS NOT A VALID FIELD CODE
L76 5 FILE MEDLINE
L77 5 FILE BIOSIS
'IN' IS NOT A VALID FIELD CODE
L78 0 FILE BIOTECHNO
L79 0 FILE JICST-EPLUS
'IN' IS NOT A VALID FIELD CODE
L80 0 FILE EMBASE
L81 3 FILE CAPLUS
L82 3 FILE WPIDS

TOTAL FOR ALL FILES

L83 16 LEEUWEN, P?/AU,IN OR LEEUWEN P?/AU,IN

=> s harvey, w?/au,in or harvey w?/au,in

'IN' IS NOT A VALID FIELD CODE
L84 410 FILE MEDLINE
L85 465 FILE BIOSIS
'IN' IS NOT A VALID FIELD CODE
L86 44 FILE BIOTECHNO
L87 0 FILE JICST-EPLUS

'IN' IS NOT A VALID FIELD CODE

L88 223 FILE EMBASE

L89 330 FILE CAPLUS

L90 83 FILE WPIDS

TOTAL FOR ALL FILES

L91 1555 HARVEY, W?/AU, IN OR HARVEY W?/AU, IN

=> s 175 and 183 and 191 and 167

L92 0 FILE MEDLINE

L93 0 FILE BIOSIS

L94 0 FILE BIOTECHNO

L95 0 FILE JICST-EPLUS

L96 0 FILE EMBASE

L97 0 FILE CAPLUS

L98 0 FILE WPIDS

TOTAL FOR ALL FILES

L99 0 L75 AND L83 AND L91 AND L67

=> s (175 or 183 or 191 or 167) and (steril?(1)therap? peptide(1)polysaccharide)

L100 0 FILE MEDLINE

L101 0 FILE BIOSIS

L102 0 FILE BIOTECHNO

L103 0 FILE JICST-EPLUS

L104 0 FILE EMBASE

L105 1 FILE CAPLUS

L106 1 FILE WPIDS

TOTAL FOR ALL FILES

L107 2 (L75 OR L83 OR L91 OR L67) AND (STERIL?(L) THERAP? PEPTIDE(L)
POLYSACCHARIDE)

=> s 1107 not 158

L108 0 FILE MEDLINE

L109 0 FILE BIOSIS

L110 0 FILE BIOTECHNO

L111 0 FILE JICST-EPLUS

L112 0 FILE EMBASE

L113 0 FILE CAPLUS

L114 0 FILE WPIDS

TOTAL FOR ALL FILES

L115 0 L107 NOT L58

=> s (117 or 125) and (175 or 183 or 191 or 167)

L116 4 FILE MEDLINE

L117 6 FILE BIOSIS

L118 0 FILE BIOTECHNO

L119 0 FILE JICST-EPLUS

L120 3 FILE EMBASE

L121 11 FILE CAPLUS

L122 7 FILE WPIDS

TOTAL FOR ALL FILES

L123 31 (L17 OR L25) AND (L75 OR L83 OR L91 OR L67)

=> s 1123 not (1107 or 158 or 141)

L124 4 FILE MEDLINE

L125 6 FILE BIOSIS

L126 0 FILE BIOTECHNO

L127 0 FILE JICST-EPLUS

Searched by: Mary Hale 308-4258 CM-1 12D16

L128 3 FILE EMBASE
L129 10 FILE CAPLUS
L130 6 FILE WPIDS

TOTAL FOR ALL FILES

L131 29 L123 NOT (L107 OR L58 OR L41)

=> dup rem l131

PROCESSING COMPLETED FOR L131

L132 20 DUP REM L131 (9 DUPLICATES REMOVED)

=> d cbib abs 1-20

L132 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2001 ACS

1998:55558 Document No. 128:132473 Use of oxidized cellulose and complexes thereof for chronic wound healing. Watt, Paul William; **Harvey, Wilson;** Lorimer, Elaine; Wiseman, David (Johnson + Johnson Medical, Inc., USA; Watt, Paul William; Harvey, Wilson; Lorimer, Elaine; Wiseman, David). PCT Int. Appl. WO 9800180 A1 19980108, 29 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1997-GB1725 19970627. PRIORITY: GB 1996-13682 19960628.

AB The use of oxidized cellulose, preferably oxidized regenerated cellulose (ORC), and complexes thereof with **structural proteins** such as **collagen**, is claimed for the prepn. of wound dressings for the treatment of chronic wounds. Preferably, the dressing is a knitted, woven or nonwoven fabric of ORC suitable for application directly to the surface of a wound as a wound dressing, or a semi-solid ointment for topical application contg. dispersed ORC fibers or powder, or a **collagen/ORC** sponge. Preferably, the chronic wound is a venous ulcer, a decubitus ulcer or a diabetic ulcer. ORC fabric (Surgicel) was suspended (4%) in dil. sodium bicarbonate at pH = 8.0 for a time that was sufficient or convert the fabric to a gelatinous mass. **Collagen** slurry was added at the same pH to give a final solids content off both Sugicel and **collagen** of 1%. The slurry was stirred and the pH was adjusted to 3.0-4.0, then molded, frozen, and freeze-dried under vacuum to obtain a sponge.

L132 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2001 ACS

1998:534897 Document No. 129:166253 Composite surgical material. **Harvey, Wilson;** Light, Nicholas D.; Haynes, Carla A. (Johnson & Johnson Medical, Inc., USA). U.S. US 5789465-A-19980804, 6 pp. (English). CODEN: USXXAM. APPLICATION: US 1994-280916 19940727.

AB A composite surgical material comprising a **collagen** matrix reinforced by a layer of a synthetic bioabsorbable material such as polylactide/polyglycolide or oxidized regenerated cellulose, and wherein oil droplets are dispersed in the **collagen** matrix. The oil droplets comprise 1% to 75% of the wt. of the composite and result in improved leak-proofing of the composite. The composite, in the form of a sheet or a tube, is esp. useful as a temporary, fully bioabsorbable prosthesis, for membranes or blood vessels where a highly leak-proof prosthesis is required. The invention also provides a method of making a composite surgical material comprising the steps of: providing a layer of a synthetic bioabsorbable material; providing a dispersion of **collagen** in an oil-in-water emulsion; coating at least one face of the layer of synthetic bioabsorbable material with the said dispersion;

and drying the composite material thus obtained.

L132 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2001 ACS

1998:618750 Document No. 129:257332 Method and apparatus for mapping the condition of a wound. Watt, Paul William; **Harvey, Wilson**; Grady, Michael; McCabe, John Patrick; Tarlton, John (Johnson + Johnson Medical Ltd., UK). Eur. Pat. Appl. EP 864864 A1 19980916, 6 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1998-301783 19980311. PRIORITY: GB 1997-5081 19970312.

AB The invention provides a diagnostic sheet for mapping the condition of a wound, wherein the sheet is selectively reactive over at least a part of its area with one or more mols. present in a wound fluid. Preferably, the sheet is comprises antibodies reactive with an antigen present in wound fluid, or peptide substrates selectively reactive with protease enzymes present in wound fluid and indicative of wound healing disorders.

L132 ANSWER 4 OF 20 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1998-044945 [05] WPIDS

AB GB 2314840 A UPAB: 19980202

Oxidised oligosaccharide composition (I) having an average molecular weight of 1000-50000 (preferably 5000-25000) daltons is new.

(I) is preferably derived from an oxidised bacterial, plant, animal or synthetic **polysaccharide**, or an oxidised cellulose or **cellulose derivative**. (I) is optionally bound to an active peptide or protein, preferably a **growth factor**, an antibiotic, or an antiseptic.

USE - (I) is used in the preparation of a composition for use as a wound dressing, preferably with an active agent uniformly distributed throughout (claimed). (I) can be used as controlled release matrices for a variety of agents, such as antiseptics, antibiotics, protein **growth factors**, anti-inflammatories, analgesics or proteinase inhibitors.

ADVANTAGE - The compositions can bind to a number of useful therapeutic agents, allowing the delivery of drugs directly to wound sites in high yields. (I) may be intimately combined with other materials (especially proteins) to form compositions with novel properties, such as haemostatic compositions.

Dwg.0/0

L132 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2001 ACS

1997:599232 Document No. 127:210406 **Biopolymer** composites for medical dressings, sponges, and implants. Haynes, Carla A.; **Harvey, Wilson**; Watt, Paul W. (Johnson & Johnson Medical Inc., USA). U.S. US 5660857 A 19970826, 7 pp. Division of U. S. Ser. No. 35,001. (English). CODEN: USXXAM. APPLICATION: US 1995-437905 19950510. PRIORITY: US 1993-35001 19930322.

AB A process for prepg. a composite comprising an insol. protein matrix and an oleaginous material, which is useful as a material for surgical dressings and biomedical implants, and as a cosmetic material for application to the skin. The process comprises the steps of mixing a protein, the oleaginous material and water to form an emulsion of the oleaginous material in an aq. dispersion of the protein, and subsequently drying or freeze-drying the emulsion to form a film or a sponge.

L132 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2001 ACS

DUPLICATE 1

1997:172461 Document No. 126:176943 Absorbable implant materials having controlled porosity. McGregor, James; Watt, Paul W.; Light, Nicholas D.; **Harvey, Wilson** (Johnson & Johnson Medical Inc., USA). Brit. UK Pat. Appl. GB 2301362 A1 19961204, 18 pp. (English). CODEN: BAXXDU. APPLICATION: GB 1995-10868 19950530.

AB Absorbable implant materials having controlled porosity are formed by (1)

providing a dispersion of a bioabsorbable polymer, such as **collagen**, in a first solvent, such as water, (2) adding particles of a second material, e.g. frozen water droplets or ice particles to the dispersion, (3) freezing the dispersion to form a frozen dispersion having the particles embedded therein, and (4) removing both the first solvent and the second material from the frozen dispersion by freeze-drying or solvent extn. to leave the porous implant material. The invention also encompasses the use of such implant materials for wound healing applications.

L132 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 2
1995:503250 Document No. 122:248425 Absorbable structures for ligament and tendon repair.. Light, Nicholas D.; McGregor, James; **Harvey, Wilson**; Watt, Paul W. (Johnson and Johnson Medical, Inc., USA). Eur. Pat. Appl. EP 645149 A1 19950329, 10 pp. DESIGNATED STATES: R: AT, CH, ES, FR, IT, LI, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1994-307076 19940928. PRIORITY: GB 1993-20100 19930929.

AB A fully absorbable prosthesis (1) for the repair of damaged ligaments and/or tendons in the form of a multilayer spiral roll comprising the following spiral layers: a foraminous layer (2) of a synthetic bioabsorbable mater.; a bioabsorbable film (3); and a layer (4) of a bioabsorbable **biopolymer** sponge. The prosthesis is prepd. comprising the steps of: providing a laminate of a foraminous layer of bioabsorbable mater. and a bioabsorbable film; coating the laminate with a layer of an aq. gel comprising a bioabsorbable polymer; rolling up the laminate and the gel layer into a spiral roll, followed by drying the gel to form a layer of bioabsorbable sponge. The foraminous layer (2) preferably comprises a synthetic bioabsorbable polymer having high tensile strength. The bioabsorbable film (3) and sponge layer (4) preferably comprise a chemotactic **biopolymer** such as **collagen**.

L132 ANSWER 8 OF 20 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1995-039152 [06] WPIDS

AB GB 2279871 A UPAB: 19950214

Compsn. for application to the surface of a carrier medium (CM) for retention of an active agent (AG) comprises AG and a soln. of an insolubilisable **polysaccharide** (PS). Also claimed is a method for the retention of AG in relation to CM which comprises applying the above compsn. to the surface of CM and chemically insolubilising the PS in situ, to form a retentive matrix for AG. Also claimed is the CM treated by this process.

AG pref. comprises a drug. PS is an alkali metal alginate esp. insolubilised by addn. of a soln. comprising a divalent metal cation salt, or is guar gum esp. insolubilised by addn. of alkali metal borate. The treated CM comprises feed pellets for aquatic organisms.

USE - The method is used to prepare delivery systems for active agents partic. those for admin. in an aq. environment such as drugs (esp. aquaculture medications partic. antiparasitic, anaesthetic or **antimicrobial agents** such as penicillin e.g. amoxycillin) for the treatment of farmed aquatic organisms comprising fish, shellfish and crustacea.

ADVANTAGE - The system of drug retention on a carrier such as a feed pellet reduces drug losses to the aquatic environment. The matrix retains both hydrophobic and hydrophilic AG. The improved retention is a particular advantage in the case of fish feed pellets, because fish feed rapidly and it is therefore necessary to retain as much AG (e.g. pharmaceutical) as possible on the pellet for the first two minutes following feeding. The PS surface treatment masks undesirable tastes of certain AG so extending the range of AG which can be administered by ingestion in this form. Prior art compsns. using AG's having undesirable taste rendered the pellets unpalatable and uptake of pellets was reduced, reducing efficiency of admin..

Dwg.1/2

ABEQ GB 2279871 B UPAB: 19970522

A method for the retention of a pharmaceutical active agent on the surface of a feed pellet for an aquatic organism, which method comprises applying to the surface of the feed pellet a composition comprising the active agent and a solution of insolubilisable **polysaccharide**, and chemically insolubilising the **polysaccharide** 'in situ', so as to form a retentive matrix for the active agent.

Dwg.0/0

L132 ANSWER 9 OF 20 BIOSIS COPYRIGHT 2001 BIOSIS

1994:328278 Document No.: PREV199497341278. **TGF**-beta immobilised on fibrinogen and **fibronectin** substrata retains functional activity. Clark, Richard A. F. (1); **Cullen, Breda**; Galanakis, Dennis; Gruber, Barry; Segarini, Patricia. (1) Dep. Dermatol., SUNY, Stony Brook, NY USA. Journal of Investigative Dermatology, (1994) Vol. 102, No. 4, pp. 580. Meeting Info.: Annual Meeting of the Society for Investigative Dermatology Baltimore, Maryland, USA April 27-30, 1994 ISSN: 0022-202X. Language: English.

L132 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2001 ACS

1993:610827 Document No. 119:210827 Protein-stabilized oil-in-water emulsions. Haynes, Carla A.; **Harvey, Wilson** (Johnson and Johnson Medical, Inc., USA). Eur. Pat. Appl. EP 562863 A1 19930929, 6 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, PT. (English). CODEN: EPXXDW. APPLICATION: EP 1993-302318 19930325. PRIORITY: GB 1992-6508 19920325.

AB Stable oil-in-water emulsions, prepd. by mixing oil, water, and an insol. protein at high shear, are useful as or in wound dressings or ointments. By varying the amt. of insol. protein, the emulsions may be made liq., semisolid, or solid. The emulsions may be medicated with hydrophilic or hydrophobic pharmacol. active agents. Thus, insol. fibrous **collagen** 8.75, sesame oil 50, and chlorhexidine gluconate 3 g were added to water (acidified to pH 4.5 with lactic acid) at 4.degree. and the mixt. was homogenized at high speed for 90 s. The resulting semisolid emulsion was stable and provided an antiseptic ointment.

L132 ANSWER 11 OF 20 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1993-330152 [42] WPIDS

AB GB 2266239 A UPAB: 19931202

A compsn. (I), used as or in a wound dressing or a wound implant, comprises at least 0.1 wt.% of at least glycosaminoglycan (GAG) oligosaccharides in the size range 1-60 disaccharide units.

USE/ADVANTAGE - (I) is in the form of a powder, cream, emollient cream, hydrocolloid, gel, web, film or sponge for applying directly to the surface of a wound, and is distributed in or on a foam fabric or a sponge. (pref. a heteromorphic sponge contg. greater than 1 GAG oligosaccharide in a mixed population of substructures and providing controlled phasic release of greater than 1 **polysaccharides** into the wound (all claimed).

Dwg.0/0

ABEQ GB 2266239 B UPAB: 19960329

A compsn. comprising at least 0.1% by wt. of chondroitin sulphate oligosaccharides in the size range of from 1 to 60 di-saccharide units for use as or in a wound dressing or a wound implant.

Dwg.0/0

L132 ANSWER 12 OF 20 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1992-064649 [08] WPIDS

AB WO 9201394 A UPAB: 19931006

The film comprises an edible protein and an edible **polysaccharide** and has a coating of an edible hydrophobic material on at least a portion

of its surface. Also claimed is a food prod. contg. the film.

The edible protein is pref. a fibrous protein or a modified fibrous protein esp. **collagen**. The **polysaccharide** is selected from charged **polysaccharides**, gums and modified celluloses, the **polysaccharide** is esp. hydroxypropylmethyl cellulose. The hydrophobic material is an edible oil or wax esp.

an esterified glyceride, more esp. acetylated monoglyceride.

USE/ADVANTAGE - The moisture barrier film is of partic. utility in the mfr. of food prods. The film is rendered at least partly moisture impermeable by the hydrophobic material. The protein component helps to maintain the integrity of film during cooking and moisture-barrier properties are retained even after cooking. The films are extrudable and have better handling properties compared to prior art films. The films are undetectable visibly or organoleptically.

0/2

ABEQ GB 2262245 A UPAB: 19931116

The film comprises an edible protein and an edible **polysaccharide** and has a coating of an edible hydrophobic material on at least a portion of its surface.

The edible protein is pref. a fibrous protein or a modified fibrous protein esp. **collagen**. The **polysaccharide** is selected from charged **polysaccharides**, gums and modified celluloses, the **polysaccharide** is esp. hydroxypropylmethyl cellulose. The hydrophobic material is an edible oil or wax esp. an esterified glyceride, more esp. acetylated monoglyceride.

USE/ADVANTAGE - The moisture barrier film is of partic. utility in the mfr. of food prods. The film is rendered at least partly moisture impermeable by the hydrophobic material. The protein component helps to maintain the integrity of film during cooking and moisture barrier properties are retained even after cooking. The films are extrudable and have better handling properties c.f. prior art films. The films are undetectable visibly or organoleptically.

ABEQ EP 550445 A UPAB: 19931116

The film comprises an edible protein and an edible **polysaccharide** and has a coating of an edible hydrophobic material on at least a portion of its surface. Also claimed is a food prod. contg. the film.

The edible protein is pref. a fibrous protein or a modified fibrous protein, esp. **collagen**. The **polysaccharide** is selected from charged **polysaccharides**, gums and modified celluloses, the **polysaccharide** is esp. hydroxypropylmethyl cellulose. The hydrophobic material is an edible oil or wax esp. an esterified glyceride, more esp. acetylated monoglyceride.

USE/ADVANTAGE - The moisture barrier film is of partic. utility in the mfr. of food prods. The film is rendered at least partly moisture impermeable by the hydrophobic material. The protein component helps to maintain the integrity of film during cooking and moisture-barrier properties are retained even after cooking. The films are extrudable and have better handling properties compared to prior art films. The films are undetectable visibly or organoleptically.

Dwg.0/0

ABEQ GB 2262245 B UPAB: 19940421

A film comprising an edible, insoluble fibrous protein or modified fibrous protein and an edible **polysaccharide**, said film having a coating of an edible hydrophobic material on at least a portion of a surface thereof.

Dwg.0/1

ABEQ EP 550445 B UPAB: 19950804

A film comprising an edible, insoluble fibrous protein or modified fibrous protein and an edible **polysaccharide**, said film having a coating of an edible hydrophobic material on at least a portion of a surface thereof.

Dwg.0/0

92246874 Document Number: 92246874. PubMed ID: 1575692. The application of a novel biotinylated affinity label for the detection of a cathepsin B-like precursor produced by breast-tumour cells in culture. **Cullen B M**; Halliday I M; Kay G; Nelson J; Walker B. (Division of Biochemistry, School of Biology and Biochemistry, Queen's University, Belfast, Northern Ireland, U.K.) BIOCHEMICAL JOURNAL, (1992 Apr 15) 283 (Pt 2) 461-5. Journal code: 9YO; 2984726R. ISSN: 0264-6021. Pub. country: ENGLAND: United Kingdom. Language: English.

AB In this report we demonstrate how the recently developed biotinylated affinity label biotinyl-Phe-Ala-diazomethane (Bio-Phe-Ala-CHN2) [Cullen, McGinty, Walker, Nelson, Halliday, Bailie & Kay (1990) Biochem. Soc. Trans. 18, 315-316; Walker, Cullen, Kay, Halliday, McGinty & Nelson (1992) Biochem. J. 283, 449-453] can be used for the detection of a precursor form of a cathepsin B-like enzyme produced by breast-tumour cells in culture. Thus the cell lines MDA-MB-436, ZR-75-1 and T47-D produce a soluble protein that can be allowed to react with the biotinylated affinity label to yield an SDS-resistant complex; this can be revealed with a streptavidin/alkaline phosphatase label after PAGE and Western blotting. This protein (molecular mass 47 kDa) can also be detected by immunoblotting using sheep anti-(cathepsin B) antibodies in conjunction with a donkey anti-sheep IgG label. None of the cell lines studied produced any mature cathepsin B-like activity, as gauged by the lack of turnover of the fluorogenic substrate benzyloxycarbonyl-Arg-Arg-4-methylcoumarin-7-ylamide (Cbz-Arg-Arg-NH-Mec). However, treatment of medium samples with **pepsin** resulted in the generation of such activity. When the **pepsin**-catalysed activation step was analysed by SDS/PAGE, the protein of 47 kDa was completely converted into two species of very similar molecular masses of 30.5 kDa and 29 kDa. Both these proteins can incorporate the biotinylated probe and, in common with the 47 kD species, they can be detected with the streptavidin/alkaline phosphatase label and immunoblotting. We propose that the 47 kD form is the **pepsin**-activable proform of these lower-molecular-mass species. The release of the proform from the oestrogen-receptor (ER)-positive breast-tumour cell lines ZR-75-1 and T47-D is stimulated 5-10-fold when these cells are grown in medium containing **epidermal growth factor (EGF)** at a concentration of 10 ng/ml. In contrast, there is no modulation in the amount of proform released by the ER-negative cell line MDA-MB-436, over a range of **EGF** concentrations from 0 to 100 ng/ml.

L132 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2001 ACS

1992:422207 Document No. 117:22207 The application of a novel biotinylated affinity label for the detection of a cathepsin B-like precursor produced by breast-tumor cells in culture. **Cullen, Breda M.**; Halliday, Isla M.; Kay, Gillian; Nelson, John; Walker, Brian (Sch. Biol. Biochem., Queen's Univ., Belfast, BT9 7BL, UK). Biochem. J., 283(2), 461-5 (English) 1992. CODEN: BIJOAK. ISSN: 0306-3275.

AB In this report it is demonstrated how the recently developed biotinylated affinity label biotinyl-Phe-Ala-diazomethane (Bio-Phe-Ala-CHN2) can be used for the detection of a precursor form of a cathepsin B-like enzyme produced by breast-tumor cells in culture. Thus the cell lines MDA-MB-436, ZR-75-1 and T47-D produce a sol. protein that can be allowed to react with the biotinylated affinity label to yield an SDS-resistant complex; this can be revealed with a streptavidin/alk. phosphatase label after PAGE and Western blotting. This protein (mol. mass 47 kDa) can also be detected by immunoblotting using sheep anti-(cathepsin B) antibodies in conjunction with a donkey anti-sheep IgG label. None of the cell lines studied produced any mature cathepsin B-like activity, as gauged by the lack of turnover of the fluorogenic substrate benzyloxycarbonyl-Arg-Arg-4-methylcoumarin-7-ylamide (Cbz-Arg-Arg-NH-Mec). However, treatment of

medium samples with **pepsin** resulted in the generation of such activity. When the **pepsin**-catalyzed activation step was analyzed by SDS/PAGE, the protein of 47 kDa was completely converted into two species of very similar mol. masses of 30.5 kDa and 29 kDa. Both these proteins can incorporate the biotinylated probe and, in common with the 47 kD species, they can be detected with the streptavidin/alk. phosphatase label and immunoblotting. It is proposed that the 47 kD form is the **pepsin**-activable proform of these lower-mol.-mass species. The release of the proform from the estrogen-receptor (ER)-pos. breast-tumor cell lines ZR-75-1 and T47-D is stimulated 5-10 fold when these cells are grown in medium contg. **epidermal growth factor (EGF)** at a concn. of 10 ng/mL. In contrast, there is no modulation in the amt. of proform released by the ER-neg. cell line MDA-MB-436, over a range of **EGF** concn. from 0 to 100 ng/mL.

L132 ANSWER 15 OF 20 MEDLINE DUPLICATE 4
 92404817 Document Number: 92404817. PubMed ID: 1326363. Stimulation of bone **collagen** and non-**collagenous** protein synthesis by products of 5- and 12-lipoxygenase: determination by use of a simple quantitative assay. Meghji S; Sandy J R; **Harvey W**; Henderson B; Ali N. (Maxillofacial Surgery and Oral Medicine Research Unit, University of London, Eastman Dental Hospital, UK.) BONE AND MINERAL, (1992 Aug) 18 (2) 119-32. Journal code: BMI; 8610542. ISSN: 0169-6009. Pub. country: Netherlands. Language: English.

AB The influence of 5- and 12-lipoxygenase products on the rate of **collagen** and non-**collagenous** protein (NCP) synthesis by murine calvarial explants has been investigated using a new assay based on the resistance of native **collagen** to degradation by **pepsin**. The reproducibility and simplicity of this assay allows the quantitative estimation of the rate of bone formation in large numbers of cultures. Hydroxyeicosatetraenoic acids (HETEs) stimulated both the rate of **collagen** and NCP synthesis with maximal stimulation occurring at 10-100 pM. All leukotrienes stimulated **collagen** synthesis. LTB₄, C₄ and D₄ showed similar dose-responses with maximal activity occurring at 100 pM. LTE₄ was less potent only showing activity at 1-10 nM. Only LTD₄ demonstrated the capacity to stimulate NCP synthesis with significant stimulation being seen at 10 nM. The extreme sensitivity of bone **collagen** and NCP synthesis to lipoxygenase products suggests that these mediators may play a physiological role in bone remodelling.

L132 ANSWER 16 OF 20 MEDLINE
 89241293 Document Number: 89241293. PubMed ID: 3073418. Cellular and molecular models of neuron-matrix adhesion in nerve fiber growth. Carbonetto S; **Harvey W J**; Douville P J; Whelan L. PROGRESS IN BRAIN RESEARCH, (1988) 78 347-52. Ref: 38. Journal code: QOB; 0376441. ISSN: 0079-6123. Pub. country: Netherlands. Language: English.

L132 ANSWER 17 OF 20 BIOSIS COPYRIGHT 2001 BIOSIS
 1989:87220 Document No.: BR36:43311. **LAMININ FIBRONECTIN** **COLLAGEN** AND THEIR RECEPTORS IN NERVE FIBER GROWTH. CARONETTO S; DOUVILLE P; **HARVEY W**; TURNER D C. NEUROSCI. UNIT, MONTREAL GEN. HOSP. RES. INST., MCGILL UNIV., MONTREAL, CAN.. REIER, P. J., R. P. BUNGE AND F. J. SEIL (ED.). NEUROLOGY AND NEUROBIOLOGY, VOL. 48. CURRENT ISSUES IN NEURAL REGENERATION RESEARCH; SYMPOSIUM ON NEURAL REGENERATION, PACIFIC GROVE, CALIFORNIA, USA, DECEMBER 6-10, 1987. XIX+410P. ALAN R. LISS, INC.: NEW YORK, NEW YORK, USA. ILLUS. (1988) 0 (0), 147-158. CODEN: NEUND9. ISSN: 0736-4563. ISBN: 0-8451-2752-7. Language: English.

L132 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2001 ACS
 1989:72868 Document No. 110:72868 **Laminin, fibronectin, collagen** and their receptors in nerve fiber growth. Carbonetto,

S.; Douville, P.; **Harvey, W.**; Turner, D. C. (Res. Inst., Montreal Gen. Hosp., Montreal, PQ, Can.). Neurol. Neurobiol., 48(Curr. Issues Neural Regener. Res.), 147-58 (English) 1988. CODEN: NEUND9. ISSN: 0736-4563.

- AB A review, with 35 refs., of the properties of **laminin**, **fibronectin**, and **collagen**, and esp. properties of their receptors and the role of these substances in nerve fiber growth.

L132 ANSWER 19 OF 20 MEDLINE

DUPLICATE 5

88059238 Document Number: 88059238. PubMed ID: 3680371. Regulation of differentiation and polarized secretion in mammary epithelial cells maintained in culture: extracellular matrix and membrane polarity influences. Parry G; **Cullen B**; Kaetzel C S; Kramer R; Moss L. (Biology and Medicine Division, Lawrence Berkeley Laboratory, University of California, Berkeley 94720.) JOURNAL OF CELL BIOLOGY, (1987 Nov) 105 (5) 2043-51. Journal code: HMV; 0375356. ISSN: 0021-9525. Pub. country: United States. Language: English.

- AB Several previous studies have demonstrated that mammary epithelial cells from pregnant mice retain their differentiated characteristics and their secretory potential in culture only when maintained on stromal **collagen** gels floated in the culture medium. The cellular basis for these culture requirements was investigated by the monitoring of milk protein synthesis and polarized secretion from the mouse mammary epithelial cell line, COMMA-1-D. Experiments were directed towards gaining an understanding of the possible roles of cell-extracellular matrix interactions and the requirements for meeting polarity needs of the epithelium. When cells are cultured on floating **collagen** gels they assemble a basal lamina-like structure composed of **laminin**, **collagen** (IV), and heparan sulfate proteoglycan at the interface of the cells with the stromal **collagen**. To assess the role of these components, an exogenous basement membrane containing these molecules was generated using the mouse endodermal cell line, PFHR-9. This matrix was isolated as a thin sheet attached to the culture dish, and mammary cells were then plated onto it. It was found that cultures on attached PFHR-9 matrices expressed slightly higher levels of beta-casein than did cells on plastic tissue culture dishes, and also accumulated a large number of fat droplets. However, the level of beta-casein was approximately fourfold lower than that in cultures on floating **collagen** gels. Moreover, the beta-casein made in cells on attached matrices was not secreted but was instead rapidly degraded intracellularly. If, however, the PFHR-9 matrices with attached cells were floated in the culture medium, beta-casein expression became equivalent to that in cells cultured on floating stromal **collagen** gels, and the casein was also secreted into the medium. The possibility that floatation of the cultures was necessary to allow access to the basolateral surface of cells was tested by culturing cells on nitrocellulose filters in Millicell (Millipore Corp., Bedford, MA) chambers. These chambers permit the monolayers to interact with the medium and its complement of hormones and **growth factors** through the basal cell surface. Significantly, under these conditions alpha 1-, alpha 2-, and beta-casein synthesis was equivalent to that in cells on floating gels and matrices, and, additionally, the caseins were actively secreted. Similar results were obtained independently of whether or not the filters were coated with matrices. (ABSTRACT TRUNCATED AT 400 WORDS)

L132 ANSWER 20 OF 20 BIOSIS COPYRIGHT 2001 BIOSIS

1987:414941 Document No.: BR33:84619. CONTROL OF NERVE FIBER GROWTH BY ADHESIVE PROTEINS OF THE EXTRACELLULAR MATRIX. CARBONETTO S; **HARVEY W**; DOUVILLE P. NEUROSCI. UNIT, MONTREAL GEN. HOSP. RES. INST., MCGILL UNIV., MONTREAL, QUEBEC, CANADA.. ELEVENTH MEETING OF THE INTERNATIONAL SOCIETY FOR NEUROCHEMISTRY AND THE EIGHTEENTH MEETING OF THE AMERICAN